

REMARKS

Claims 21-32 are all the claims presently pending in the application. Claims 1-20 are canceled. New claims 25-32 are added.

New claims 25-28 and 31 are based on the description at lines 16-21 of page 7 of the specification.

It is noted that the claim amendments, if any, are made only for more particularly pointing out the invention, and not for distinguishing the invention over the prior art, narrowing the claims or for any statutory requirements of patentability. Further, Applicant specifically states that no amendment to any claim herein should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

Claims 21-24 stand rejected under 35 U.S.C. § 103(a) as unpatentable over WO 02/37889 to Ramesh et al, further in view of US Patent Publication 2004/0058650 to Palenius et al., and further yet in view of US Patent No. 6,400,946 to Vazvan et al.

This rejection is respectfully traversed in the following discussion.

I. THE CLAIMED INVENTION

As described exemplarily in independent claim 21, the claimed invention is directed to a method of determining a most suitable cell during network acquisition for a cellular communications device, based on a characteristic of signals received from a plurality of cells, the signals from each cell being provided over a band of frequencies. A series of measurements are taken the characteristics for each frequency of a first frequency band, so as to obtain an average measurement value of the characteristic for each frequency of the first frequency band, wherein the series of measurements on the first frequency band are equally spaced in time, with equal time intervals therebetween. During the time intervals between measurements for the first frequency band, a series of measurements of the characteristic for each frequency of a second frequency band are taken. The first and second frequency bands operate in different operating modes.

As explained at line 28 of page 4 through line 16 on page 5, Applicants have recognized that the 3GPP specification requirement for five measurements for each Docket WN-2622 (GOT.081)

frequency within the frequency band be obtained within 3 seconds as being equally spaced does not necessarily mean that each of the large number of measurements be equally spaced from each other. The present invention uses the realization that only the measurements conducted on the same frequency need to be equally spaced (lines 8-13 on page 5).

Moreover, as explained at lines 12-18 of page 3, this technique allows a second band of frequencies to be searched, either within the same RAT (radio technology) or in another RAT, as well as second-stage search operations.

As exemplarily shown in the Figure, during the four equal-time intervals 12,14,16,18 shown on the horizontal axis over which a first frequency 1 is to be measured five times A,B,C,D,E, the present inventors have recognized that all remaining frequencies (e.g., 2 through n, shown in the vertical axis) of the RAT under evaluation can be rapidly and sequentially measured immediately after each respective measurement A,B,C,D,E of the first frequency 1.

As further explained at lines 17-24 on page 5 (and reflected in the independent claims), there are exemplarily (at least) two bands of frequencies represented in the n = 546 frequencies shown in the vertical axis: the EGSM 900 band contains 172 frequencies, and the GSM 1800 band contains 374 frequencies.

II. THE PRIOR ART REJECTIONS

Claims 21-24 stand rejected as obvious over Ramesh, further in view of Palenius, and further yet in view of Vazvan. The Examiner concedes that primary reference Ramesh fails to teach or suggest using a plurality of modes and relies upon secondary reference Palenius and tertiary reference Vazvan.

Applicants respectfully submit that, even if combined, the combination would not result in the claimed invention. That is, contrary to the Examiner's characterization, secondary reference Palenius is not directed to a mobile terminal having two or more operational modes. Rather, this reference addresses a WCDMA mobile terminal (see paragraphs [0028] and [0033] wherein there are three stages of the cell search.

The first stage, as described in paragraph [0029], the WCDMA mobile terminal searches received information for a first synchronization code common to the plurality

of cells. The second stage, as described in paragraph [0030], searches for a second synchronization code common to a subgroup of the plurality of cells. The third stage, as described in paragraph [0031], searches for a third code unique to one of the cells.

In the rejection currently of record, the Examiner points to paragraphs [0014] and [0033] of Palenius, alleging that these two paragraphs demonstrate two different frequency bands with an interweaving. However, Applicants point out that having two frequency bands in secondary reference Palenius is actually irrelevant to the present evaluation, since primary reference Ramesh clearly has only one operating mode and only one frequency band. Therefore, the Examiner's initial burden is to provide a rationale to modify primary reference to include a second frequency band and to demonstrate that the two frequencies described briefly in Palenius are meant to refer to two operating modes. That is, Applicants respectfully submit that the mere fact of having two frequencies, as described in paragraphs [0014] and [0031] of Palenius does not demonstrate two operation modes. Thus, Applicants submit that there is no suggestion in secondary reference Palenius to use two or more modes.

Moreover, the descriptions in these two paragraphs of Palenius are not directed to the initial cell search. Rather, in both paragraphs, the description actually relates to having a first frequency that is currently active and conducting a cell search for other cells. This concept is entirely different from that of alleging that Palenius teaches addition of a second band of frequencies to primary reference Ramesh, let alone a second frequency band due to a second mode of operation.

Thus, Applicants respectfully submit that secondary reference Palenius adds little, if anything, to overcome the deficiency of primary reference Ramesh.

Relative to tertiary reference Vazvan, relied upon by the Examiner to demonstrate the feature of having two or more operating modes, each having its own frequency band, Applicants respectfully submit that this reference actually teaches against overcoming the deficiency of primary reference Ramesh, as necessary to satisfy the plain meaning of the language of the independent claims.

That is, as clearly described even in the Abstract, Vazvan actually selects a first network and establishes connection thereto, and then proceeds to select a second network. Thus, there is no suggestion in tertiary reference Vazvan to concurrently measure two modes before determining which cell and network is most suitable.

Indeed, based upon the description in the Abstract, Vazvan can only be reasonably described as clearly teaching against the very modifications that are required to primary reference Ramesh to satisfy the plain meaning of the claim language of the independent claims.

Therefore, even if secondary reference Palenius and tertiary reference Vazvan were to be combined with primary reference Ramesh, the combination would not provide the result described in the independent claims.

Hence, turning to the clear language of the claim language, in Ramesh there is no teaching or suggestion of: “A method of determining a most suitable cell during network acquisition ... during the time intervals between measurements for said first frequency band, taking a series of measurements of said characteristic for each frequency of a second frequency band, wherein said first and second frequency bands operate in different operating modes”, as required by independent claim 21. Independent claim 23 has similar wording.

Relative to new independent claim 29, there is no teachign or suggestion in Ramesh of: “A method of determining a most suitable cell and a most suitable mode for a cellular communication device capable of operating in at least two modes, each operating mode having a plurality of frequencies occupying a frequency band, said method comprising: for each time period of a predetermined number of successive time periods, sequentially taking measurements of a characteristic for each frequency of each frequency band for each operating mode said cellular communication device is capable, each said time period being equal in time; calculating an average values of said characteristic for each frequency of each frequency band; and selecting said most suitable cell and said most suitable mode based upon said average values.”

Moreover, relative to dependent claims 26, 28, and 31, there is no suggestion in the cited prior art to disrupt the normal number of cycles of determining the most suitable cell/mode by discovering a cell having an unusually good signal strength.

Therefore, Applicant submits that there are elements of the claimed invention that are not taught or suggested by Ramesh. Therefore, the Examiner is respectfully requested to withdraw this rejection.

Amendment Under 37 CFR §1.111
S/N: 10/714,672

III. FORMAL MATTERS AND CONCLUSION

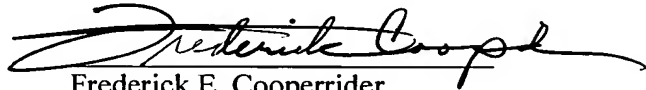
In view of the foregoing, Applicant submits that claims 21-32, all the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Respectfully Submitted,

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